

GUIDELINES FOR THE CONTROL OF HAZARDS OF ANIMAL HEALTH AND PUBLIC HEALTH IMPORTANCE IN ANIMAL FEED

PART 1

INTRODUCTION

Animal feed is a critical component of the food-chain that has a direct impact on animal health and welfare and also on food safety and public health.

Historically, the OIE primarily addressed animal feed as an important pathway for the entry and spread of contagious epidemic diseases, such as foot and mouth disease, swine vesicular disease and avian influenza. In recent years, the role of feed as a vector for disease agents, including zoonotic organisms, was a focus of standards development in regards to bovine spongiform encephalopathy. Animal feed and feed ingredients are widely traded internationally and trade disruptions have the potential to impact economies in both developed and developing countries. Since 2002 the OIE has expanded its zoonotic disease mandate to encompass animal production food safety, working in collaboration with the Codex Alimentarius Commission (CAC) and other international organisations. In 2006 the International Committee resolved that the OIE should develop guidance on foodborne zoonoses and animal feeding, complementing relevant CAC texts.

PURPOSE

The purpose of this OIE guideline is to provide guidance on animal feeding in relation to animal health and to complement the guidance provided by the Codex Code of Practice on Good Animal Feeding (CAC/RCP 54-2004) which deals primarily with food safety.

This guideline aims at ensuring the control of animal and public health hazards through adherence to recommended practices during the production (procurement, handling, storage, processing and distribution) and use of both commercial and on-farm produced animal feed and feed ingredients for food producing animals.

SCOPE

This guideline applies to the production and use of all products destined for animal feed and feed ingredients at all levels whether produced commercially or on farm. It also includes grazing or free-range feeding, forage crop production and water for drinking. Swill feeding is a particular aspect of on-farm practice that is specifically addressed because of its recognised role in disease transmission.

This guideline deals with feed for food-producing animals other than aquatic animals (i.e. livestock and poultry).

DEFINITIONS

Hazard

means a biological, chemical or physical agent in, or a condition of, feed or a feed ingredient with the potential to cause an adverse effect on animal or public health.

Feed

means any material (single or multiple), whether processed, semi-processed or raw, which is intended to be fed directly to food-producing animals.

Feed additives

means any intentionally added ingredient not normally consumed as feed by itself, whether or not it has nutritional value, which affects the characteristics of feed or animal products. Microorganisms, enzymes, acidity regulators, trace elements, vitamins and other products fall within the scope of this definition depending on the purpose of use and method of administration. This excludes veterinary drugs.

Medicated feed

means any feed which contains a veterinary drug administered to food producing animals, for therapeutic or prophylactic purposes or for modification of physiological functions.

Feed ingredient

means a component part or constituent of any combination or mixture making up a feed, whether or not it has a nutritional value in the animal's diet, including feed additives. Ingredients are of plant, animal or aquatic origin, or other organic or inorganic substances.

Undesirable substance

means a contaminant or other substance which is present in and/or on feed and feed ingredients and which constitute a risk to animal or public health.

Commercial feed

means all materials that are sold and distributed as feed, or to be mixed with feed, for animals except: unmixed seed, whole, processed, or unprocessed; straw, stover, silage, cobs, husks, and hulls; or individual chemical compounds not mixed with other ingredients.

Cross contamination

means contamination of a material or product with another material or product containing a component that is potentially harmful for animal or public health or restricted under the regulatory framework.

GENERAL PRINCIPLES

Roles and responsibilities

The Competent Authority has the legal power to set and enforce regulatory animal feeding requirements, and has final responsibility for verifying that these requirements are met. The Competent Authority may establish regulatory requirements for relevant parties to provide it with information and assistance. Refer to Chapters 1.3.3. and 1.3.4. of the OIE *Terrestrial Code*.

Those involved in the production and use of animal feed and feed ingredients have the responsibility to ensure that these products meet regulatory requirements. All personnel involved in the manufacture, storage and handling of feed and feed ingredients should be adequately trained and aware of their role and responsibility in preventing the spread of animal health and public health hazards. Appropriate contingency plans should be developed. Equipment should be maintained in good working order and in a sanitary condition.

It is a particular responsibility of Veterinary Services to set and enforce the regulatory requirements pertaining to the use of veterinary drugs, animal disease control and the food safety aspects that relate to the management of live animals on farm.

Those providing specialist services to producers and to the feed industry (e.g. private veterinarians and laboratories) may be required to meet specific regulatory requirements pertaining to the services they provide (e.g. disease reporting, quality standards, transparency).

Regulatory safety standards

All feed and feed ingredients should meet regulatory safety standards. In defining limits and tolerances for hazards, scientific evidence, including the sensitivity of analytical methods and on the characterisation of risks, should be taken into account.

Risk analysis (risk assessment, risk management and risk communication)

Internationally accepted principles and practices on risk analysis (Section 1.3. of the OIE *Terrestrial Code*; and relevant Codex texts) should be used in developing and applying the regulatory framework.

Application of a generic framework should provide a systematic and consistent process for managing all biosecurity risks, while recognising the different risk assessment methodologies used in animal and public health.

Good practices

Where national guidelines exist, good agricultural practices and good manufacturing practices (including good hygienic practices) should be followed. Countries without such guidelines are encouraged to develop them.

Where appropriate, Hazard Analysis and Critical Control Point¹ (HACCP) principles should be followed to control hazards that may occur in feed.

Geographic and environmental considerations

Land and facilities used for production of animal feed and feed ingredients and water sources should not be located in close proximity to sources of hazards for animal health or food safety. Animal health considerations include factors such as disease status, location of quarantined premises and existence of zones/compartments of specified health status. Food safety considerations include factors such as industrial operations that generate pollutants and waste treatment plants.

Zoning and compartmentalisation

Feed is an important component of biosecurity and needs to be considered when defining a compartment or zone in accordance with Chapter 1.3.5. of the OIE *Terrestrial Code*.

Sampling and analysis

Sampling and analytical protocols should be based on scientifically recognized principles and procedures.

Labelling

Labelling should be clear and informative as to how the feed and feed ingredients should be handled, stored and used and should comply with regulatory requirements.

¹¹ Hazard Analysis and Critical Control Point, as defined in the Annex to the Recommended International Code of Practice on General Principles of Food Hygiene (CAC/RCP 1-1969).

See Codex Code of practice on good animal feeding (CAC/RCP 54-2004).

Design and management of inspection programmes

In meeting animal and public health objectives prescribed in national legislation or required by importing countries, Competent Authorities contribute through the direct performance of some tasks or through the auditing of animal and public health activities conducted by other agencies or the private sector.

Feed and feed ingredients business operators and other relevant parts of industry should practice self-regulation to secure compliance with required standards for procurement, handling, storage, processing, distribution and use. Operators have the primary responsibility for implementing systems for process control. Where such systems are applied, the Competent Authority should verify that they achieve all regulatory requirements.

Assurance and certification

Competent Authorities are responsible for providing assurances domestically and to trading partners that regulatory requirements have been met. For international trade in animal product based feeds, *Veterinary Services* are required to provide international veterinary certificates.

Hazards associated with animal feed

Biological hazards

Biological hazards that may occur in feed and feed ingredients include agents such as bacteria, viruses, prions, fungi and parasites.

Chemical hazards

Chemical hazards that may occur in feed and feed ingredients include naturally occurring chemicals (such as mycotoxins and gossypol), industrial and environmental contaminants (such as dioxins and PCBs), residues of veterinary drugs and pesticides and also radionuclides.

Physical hazards

Physical hazards that may occur in feed and feed ingredients include foreign objects (such as pieces of glass, metal, plastic or wood).

Cross contamination

It is important to avoid cross-contamination during the manufacture, storage, distribution (including transport) and use of feed and feed ingredients and relevant provisions should be included in the regulatory framework. Scientific evidence, including the sensitivity of analytical methods and on the characterisation of risks, should be drawn upon in developing this framework.

Procedures, such as flushing, sequencing and physical clean-out, should be used to avoid cross-contamination between batches of feed or feed ingredients.

Antimicrobial resistance

Concerning the use of antimicrobials in animal feed refer to Section 3.9. of the OIE *Terrestrial Code*.

Management of information

The Competent Authority should establish clear requirements for the provision of information by the private sector as this relates to regulatory requirements.

Records should be maintained in a readily accessible form regarding the production, distribution and use of feed and feed ingredients. These records are required to facilitate the prompt trace-back of feed and feed ingredients to the immediate previous source, and trace-forward to the next subsequent recipients, to address identified animal health or public health concerns.

Animal identification and *animal traceability* are tools for addressing animal health (including zoonoses), and food safety risks arising from animal feed (see Section 3.5. of the OIE *Terrestrial Code*; Section 4.3. of CAC/RCP 54-2004).
